

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Sandra Parkington Examiner: Kai Rajan

Application No.: 10/756,179 Group Art Unit: 3769

Filed: 1/12/2004

Title: METHOD AND SYSTEM FOR TRACKING SODIUM INTAKE

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APPEAL BRIEF

MAIL STOP APPEAL BRIEF  
Commissioner for Patents  
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SIR:

Applicant filed a Notice of Appeal on March 8, 2011, in response to the Examiner's final rejection of claims 1-9 in the Final Office Action issued September 8, 2010. Pursuant to 37 C.F.R. § 41.37, applicant now submits this Appeal Brief, and respectfully request that the rejections asserted against the pending claims be reversed, and that the pending claims be found patentable and in condition for allowance.

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## **I. REAL PARTY IN INTEREST**

The real party in interest is Sandra Parkington, the inventor.

**II. RELATED APPEALS AND INTERFERENCES**

The undersigned, as the Applicant's representative, is not aware of any related appeals or interferences.

### **III. STATUS OF CLAIMS**

Claims 1-9 are pending in this case and have been finally rejected. Claim 10-14 have been withdrawn from consideration. Applicant appeals the rejection of claims 1-9. A copy of the appealed claims is presented in the Claims Appendix.

**IV. STATUS OF AMENDMENTS**

No amendments have been filed subsequent to the Final Office Action filed on September 8, 2010.

## **V. SUMMARY OF CLAIMED SUBJECT MATTER**

The pending claims include one independent claim, claim 1, which is summarized below.

The remainder of the pending claims depend from claim 1. Since none of the dependent claims is separately argued, a concise explanation of the subject matter of the dependent claims is not provided pursuant to the waiver of this requirement under 37 C.F.R. 41.37(c)(1)(v).

The subject matter defined in independent claim 1 finds support throughout the specification.

The table below summarizes where support may be found for the limitations of claim 1.

<b><u>Claim 1 Limitation</u></b>	<b><u>Citations to Examples of Specification Support</u></b>
a. determining an amount by weight, of a standard measurement system, of dietary sodium a subject is allowed to consume during an intake period, the amount being specific to a particular subject;	Paragraphs [0029][0030] [0031] [0033]; Step 33 in Fig. 2.
b. converting the amount by weight of dietary sodium so determined into intake points by use of a preset ratio of the amount by weight of the standard measurement system to intake points, the conversion being performed by a processor and the preset ratio being programmable into the processor, the preset ratio resulting in a total number of the intake points the subject is allowed to consume during an intake period that is one or two digits long;	Paragraphs [0029][0030] [0031]; Fig. 1; Steps 35, 37 in Fig. 2.
c. selectively displaying on a display a conversion scale listing the relationship between multiple intake point values and the corresponding amounts by weight of dietary sodium, the multiple relationships being displayed simultaneously and being based on the preset ratio, the display operatively connected to the processor;	Paragraph [0047]; Figs. 1 and 8.
d. determining the amount by weight of the standard measurement system of dietary sodium in a portion of food that will be consumed by the subject;	Paragraph [0031] [0032]; Step 37 in Fig. 2.

<p>e. selectively entering into the processor the number of intake points associated with the portion of food that will be consumed or the amount by weight of the standard measurement system of dietary sodium in a portion of food that will be consumed, such entry into the processor of the number of intake points or the amount by weight of dietary sodium being user-selectable;</p>	<p>Paragraph [0047] [0051]; Figs. 8 and 9.</p>
<p>f. converting the amount by weight of the standard measurement system of dietary sodium in the portion of food to be consumed to intake points by use of said preset ratio;</p>	<p>Paragraph [0029] [0050]; Step 37 in Fig. 2</p>
<p>g. maintaining a running sum of intake points which are equivalent to dietary sodium consumed by the subject during the intake period; and</p>	<p>Paragraph [0047] [0051]; Step 38 in Fig. 2; Fig. 8</p>
<p>h. displaying as an output the running sum of intake points on the display.</p>	<p>Paragraph [0047] [0053]; Figs. 8 and 10.</p>

## **VI. GROUNDS FOR REJECTION TO BE REVIEWED ON APPEAL**

Claims 1-4 and 7-9 are rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 6,436,036 to Miller – Kovach et al. (“Miller – Kovach et al.”).

## **VII. ARGUMENT**

### **1. Independent Claim 1**

Claims 1-4 and 7-9 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Miller-Kovach et al. US Patent No. 6,436,036B1.

Applicant submits that the prior art cited by the Examiner does not show at least subparagraph "b" of claim 1, copied below for convenience.

b. converting the amount by weight of dietary sodium so determined into intake points by use of a preset ratio of the amount by weight of the standard measurement system to intake points, the conversion being performed by a processor and the preset ratio being programmable into the processor, the preset ratio resulting in a *total number of the intake points the subject is allowed to consume during an intake period that is one or two digits long*;

In the Office Action, the Examiner cites to Fig. 8a of Miller-Kovach as support for the rejection. However, Applicant notes that Fig. 8a and its associated description focus on calculating points values associated with a candidate food serving. That is, Fig. 8a provides a tool to calculate the point value associated with a particular food. In contrast, sub-paragraph "b" of claim 1 focuses on using a processor and a preset ratio to produce "a total number of the intake points the subject is allowed to consume during an intake period that is one or two digits long."

Miller-Kovach mentions a daily allotment determination, but it is not associated with Fig. 8a. Instead, Miller-Kovach states in its Abstract, for instance, a range or maximum number of points allotted per day may be determined based on current body weight, caloric reduction to be achieved, physical activity level, and physical activity duration. Miller-Kovach states that the range of points allotted per day may be determined in accordance with the following table:

Current Body Weight	Range Of Points Allotted Per Day	50
Less than 150 pounds	18-25	
159 to 174 pounds	20-27	
175 to 199 pounds	22-29	
200 to 224 pounds	24-31	
225 to 250 pounds	26-33	
Over 250 pounds	28-35	55

Miller-Kovach explains in several locations that target daily points are entered by the user (see, e.g., col. 7, ll. 55 – col. 10, ll. 5). However, the determination of a given individual's total daily points is not a calculation in Miller-Kovach (no less is it a calculation using a preset ratio); rather it is a self-administered survey based accounting of factors such as age, physical activity level and gender.

The instant application focuses on sodium intake, not food intake. A daily points target or allotment of sodium is prescribed by a health care provider, it can be changed often, and it is based on patient reported symptoms such as ease of breathing, fatigue, ankle swelling, and dizziness for example as well as clinical factors such as blood pressure and "fluid weight." Miller-Kovach does not use a processor and a preset ratio to produce "a total number of the intake points the subject is allowed to consume during an intake period," as required by subparagraph "b" of claim 1.

Moreover, the Examiner also states in the Office Action that it would be obvious to substitute sodium for the dietary parameters (e.g., calories, fat, fiber, sugar) tracked in Miller-Kovach. Applicant respectfully disagrees. Miller-Kovach teaches away from a points calculation of an independent dietary parameter, such as sodium.

Miller-Kovach addresses an individual's general overall health relative to "fat weight." This "fat" weight is a result of fat, fiber, and caloric intake modified by a range of physical activity. Miller-Kovach discloses at least two different algorithms (equations) for calculating points measured for such "fat weight," which are copied below.

$$p = \frac{c}{k_1} + \frac{f}{k_2} \quad p = \frac{c}{k_1} + \frac{f}{k_2} - \frac{r}{k_3}$$

"P" is the calculated points; "c" is calories associated with a particular food item; "f" typically represents fat content; "r" represents dietary fiber content; and  $k_1$ ,  $k_2$ , and  $k_3$  are constants. Under a "fat weight" system such as Miller-Kovach, all the variables are interdependent. A change in one variable (e.g., fat) typically increases or decreases the value of another variable (e.g., calories).

The method of the instant application focuses on "fluid" weight strictly as a result of sodium intake. Sodium is a specific nutrient which, when over-consumed, has a direct impact on specific treatable medical issues such as heart disease, kidney disease, high blood pressure and many other acute and chronic health conditions. Daily "fluid" weight measures and alterations of daily targets have an immediate impact on the treatment and control of such "fluid weight" as

well as on the specific medical issue being addressed. Physical activity as a modifier of sodium intake has a negligible impact on “fluid weight.” Further, “fluid weight” rises and falls at a faster rate than does “fat weight.” As a result, sodium as a trackable nutrient, must be measured independently.

Miller-Kovach, as noted by the algorithms copied above, teaches away from a points calculation of an independent parameters, such as sodium. Simply inserting sodium into the Miller-Kovach ratio calculation is tantamount to adding “zero” since sodium does not have an interdependency with the other nutrients nor with physical activity included in the their calculation. Thus their points system would never reflect an impact as a result of adding sodium to the formula calculation. The claimed method uses a range of sodium milligrams per point to directly isolate and measure sodium as an independent effect on fluid weight. Depending on the individual’s resultant fluid weight, the prescribed sodium intake (e.g., daily intake) target for the individual may be changed and the claimed method may be used to help an individual maintain a healthy amount of fluid weight. Accordingly, if sodium were used in Miller-Kovach’s points algorithm (where nutrients are measured relative to other nutrients and physical activity measured), the calculation would be invalid. In short, a claimed sodium-based point is not the same as nor can ever be the same as a Miller-Kovach point, nor can be included in Miller-Kovach’s calculation. For these reasons, claim 1 is not obvious over Miller-Kovach.

2. Dependent Claims 2-9

Claims 2-9, which depend from claim 1, are likewise not obvious for the reasons cited above with regard to claim 1.

### **VIII. CLAIMS APPENDIX**

1. A method for tracking sodium intake comprising the steps of:
  - a. determining an amount by weight, of a standard measurement system, of dietary sodium a subject is allowed to consume during an intake period, the amount being specific to a particular subject;
  - b. converting the amount by weight of dietary sodium so determined into intake points by use of a preset ratio of the amount by weight of the standard measurement system to intake points, the conversion being performed by a processor and the preset ratio being programmable into the processor, the preset ratio resulting in a total number of the intake points the subject is allowed to consume during an intake period that is one or two digits long;
  - c. selectively displaying on a display a conversion scale listing the relationship between multiple intake point values and the corresponding amounts by weight of dietary sodium, the multiple relationships being displayed simultaneously and being based on the preset ratio, the display operatively connected to the processor;
  - d. determining the amount by weight of the standard measurement system of dietary sodium in a portion of food that will be consumed by the subject;
  - e. selectively entering into the processor the number of intake points associated with the portion of food that will be consumed or the amount by weight of the standard measurement system of dietary sodium in a portion of food that will be consumed, such entry into the processor of the number of intake points or the amount by weight of dietary sodium being user-selectable;
  - f. converting the amount by weight of the standard measurement system of dietary sodium in the portion of food to be consumed to intake points by use of said preset ratio;

- g. maintaining a running sum of intake points which are equivalent to dietary sodium consumed by the subject during the intake period; and
- h. displaying as an output the running sum of intake points on the display.

2. The method of claim 1 including the further step of repeating steps a. to h. for successive intake periods.
3. The method of claim 2 includes the step of making each intake period a day.
4. The method of claim 1 including the further steps of:
  - i. recording the weight of the subject at the beginning of each intake period; and
  - j. recording the weight of the subject at least once per day.
5. The method of claim 4 including the further steps of:
  - k. determining the change in weight between the weight recorded at the beginning of the intake period as compared to the weight taken at the beginning of the previous intake period;
  - l. determining if the change in weight exceeds a preset threshold amount; and;
  - m. taking remedial action if the change of weight exceeds the threshold amount.
6. The method of claim 5 wherein the step of taking remedial action is consulting with a health specialist.
7. The method of claim 1 wherein the standard measurement system used is selected from the group of the English system or the Metric system.
8. The method of claim 1 wherein the standard measurement system is the Metric system.
9. The method of claim 8 wherein the preset ratio is 100 milligrams of sodium per 1 intake point.

## **IX. EVIDENCE APPENDIX**

1. U.S. Patent No. 6,436,036 to Miller – Kovach et al., first cited by the Examiner in an Office Action dated December 28, 2009.

**X. RELATED PROCEEDINGS APPENDIX**

None.